Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matters of	)	
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	)	
	)	
Rulemaking to Amend Part 1 and Part 21	)	
of the Commission's Rules to Redesignate	)	CC Docket
the 27.5 - 29.5 GHz Frequency Band and	)	
to Establish Rules and Policies for	)	No. 92-297
Local Multipoint Distribution Service;	)	
	)	
Applications for Waiver of the	)	RM-7872; RM-7722
Commission's Common Carrier	)	
Point-to-Point Microwave Radio	)	
Service Rules;	)	
	)	
Suite 12 Group Petition for Pioneer's	)	PP-22
Preference;	)	
	)	
University of Texas - Pan American	)	
Petition for Reconsideration of	)	
Pioneer's Preference Request Denial	)	

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Comments of Ameritech on LMDS NPRM

Introduction and Summary

The Commission's proposal to redesignate use of the 28 GHz band from point-to-point microwave common carrier service to a Local Multi-point Distribution Service (LMDS) is evidence of the Commission's encouragement of advances in radio technology and its willingness to promote new and innovative services for the public. Ameritech supports the Commission's efforts in this regard.

To most effectively achieve the goal of innovation and advancement in the area of LMDS, Ameritech encourages the

Commission to adopt rules that permit as much flexibility as possible, thus enabling the service to evolve in response to market demand. For this to occur, the Commission's rules should not be based on any one technology over other existing or potential alternatives. Today's rapidly accelerating technological change demands that customers, not industry participants, determine how the service develops. In moving expeditiously in the area of LMDS, the Commission should adopt rules which permit the service to evolve in a manner which focuses upon customer needs, rather than on the desires of the developing industry and its hopeful participants.

Structural and Technical Issues

The Commission has proposed that the 28 GHz band be licensed in two blocks of 1000 megahertz each to two carriers. Awarding two licenses per geographic area seems appropriate in view of the nature and breadth of competition which LMDS operators will face. New licensees will enter video services markets already contested by CATV operators, multiple over-the-air broadcasters, video cassette and disk rental and sales outlets (many of which are chain or franchise enterprises), direct broadcast satellite (DBS) service, and increasingly sophisticated multimedia home entertainment systems. Given the diversity of these existing competitors, more than two LMDS licensees per service area would not seem prudent.

The Commission further proposes to divide each 1000 megahertz band into channels of 20 MHz each. Such a requirement appears to follow the lead of existing technology,[1] rather than customers' needs for new and innovative service. The Commission should adopt a flexible approach that permits innovation and recognizes the possibility that different, potentially preferable solutions may emerge from the technological progress soon to follow the introduction of service.

For the same reason, requirements for such parameters as power, modulation and emission characteristics (¶ 24) should be minimal. Given the fact that LMDS is a new and evolving service, such technical characteristics should be allowed to evolve as technology develops in response to emerging customer demand. Technical standards should also be flexible. Unlike cellular and PCS services, LMDS is not currently envisioned as a "mobile" service. LMDS subscribers will use the service in a fixed location. Thus, the issue of standards necessitated by intersystem roaming is not present here. Technical standards should be limited

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[1]The Commission notes that this requirement is based on Suite 12's equipment (¶ 20):

> "Suite 12's patented technology, the only equipment which appears to be capable of providing direct customer services in the 28 GHz band at this time, uses channels of 20 MHz to provide video service. Since it appears that video service will be, at least initially, the primary service offered in LMDS, we propose to divide each 1000 megahertz band into channels of 20 MHz each."

to those which are absolutely essential to control interference and ensure coordinated service between systems.

The Commission has also proposed to permit both terrestrial and fixed satellite services to share use of the 28 GHz band. This proposal is in response to Motorola Satellite Communications, Inc.'s request to use part of the bandwidth for satellite uplinks. Implementation of sharing in this band may invite new problems for the industry and the Commission. In Docket 92-9, the Commission is wrestling with the issue of whether fixed microwave and PCS applications can share the 2 GHz band. As the multitude of comments filed on that issue suggest, the issue is complex and potentially troublesome. The Commission should not invite similar problems here.

Regulatory and Licensing Issues

Regulatory Status -- On the issue of regulation of LMDS providers, the Commission seems to favor less, rather than more, regulation for LMDS providers. The Commission proposes, for example, that LMDS licensees be permitted to choose whether they operate on a common carrier or non-common carrier basis. ¶¶ 25-26. The Commission also proposes that LMDS operators electing common carrier status be classified as "non-dominant" carriers, subject to streamlined tariff regulation. Ameritech supports the approach of imposing less, rather than more, regulation on LMDS operators. Ameritech requests only that there be equal

regulatory treatment of all LMDS operators, including local exchange carriers providing LMDS on a competitive basis.

Cross-Ownership -- Similarly, the Commission proposes that no restrictions on cross-ownership should apply. As articulated in Ameritech's Comments on the PCS NPRM, full participation in an industry by all interested players continues to offer the best means to stimulate both robust competition and the full development and timely deployment of new and innovative services.[2]

Geographic Scope of License -- The Commission's proposal to structure LMDS licensing in accordance with the 487 "Basic Trading Areas" (BTAs) described by Rand McNally is consistent with robust competitive development of LMDS. The adoption of BTA service areas would provide a chance for participation by the greatest number of providers and, from this breadth of participation, the greatest chance for service diversity and innovation. The value of diversity, especially in the initial state of market development, should not be underestimated. What customers will want from LMDS is still anyone's guess; numerous regional service offerings will provide an appropriate laboratory for developing evidence of consumer choice.

Build-Out Requirements -- The Commission's proposal that licensees be capable of providing LMDS service to at least 90% of the population residing within the licensed

[2]Ameritech's Comments on the PCS NPRM, GEN Docket No. 90-314, ET Docket No. 92-100, November 9, 1992, pp. 16-17.

service area within three years of being granted a license is another example of a rule that may dictate adoption of a particular technology, rather than encourage innovation. Adoption of a rule demanding 90% coverage within three years would virtually require that all licensees obtain a license from and utilize the technology developed by Suite 12, which, as the Commission notes, is currently the only provider of the hardware and software.

Although Ameritech does not dispute the Commission's award of a pioneer preference to Suite 12, it would be counterproductive to ensure that the Suite 12 technology is adopted as the de facto industry standard for LMDS. Suite 12's system is in large part untested and may have latent problems. For example, Suite 12 has conducted only a single cell demonstration in an urban environment with many buildings, permitting reflection to be used for signal coverage in some areas. Signal propagation in a less urban area, with more foliage, may yet prove to be problematic. This needs to be tested.

Interference problems may also be inherent in the Suite 12 technology. Suite 12 bases its expanded service area scheme on a "cellular reuse pattern" based upon orthogonal signal transmission polarization. They also retransmit to blind spots within a cell by the same technique. It is easy to envision areas in a given cell where the retransmitted signal from the center of that cell and a directly transmitted signal from an adjacent cell, both of the same

polarity, would reach a receiving antenna with a phase displacement and thus interfere with one another. Other technologies may present other solutions to these problems. Rules should not be adopted that prevent development of other technologies.

License Term -- The Commission has proposed a five year license term. Because the video services market already has many well-entrenched competitors, a new entrant with a new technology will require time to establish its service and gain customers. For this reason, a ten year license term is more appropriate.

Selection Process -- To select among applicants, the Commission proposes to use random selection or competitive bidding, if authorized by Congress. Ameritech favors a competitive bidding process for LMDS licensing. Competitive bidding would maximize efficiencies in the processing of applications, allocation of the licenses and implementation of the service. A bidding process would be easy to administer and, thus, would not use substantial Commission resources during the selection process. The Commission would not need to review the legal, financial or engineering qualifications of the applicants.

Competitive bidding would also pose a low risk of post-selection litigation. The single criterion for choosing a winner would be objective -- price. Once a bidder is selected, that should be the end of the matter. There would be no debate over subjective criteria such as whether one

bidder's proposals are more consistent with the public interest than another bidder's proposals. As long as the winning bidder is entitled to hold a license under the rules and the Communications Act, there should be no need for post-selection litigation.

It should be recognized that competitive bidding will tend to discourage the most egregious forms of speculation. When the Commission uses a mechanism with relatively low participation costs (e.g., cellular lotteries), any entity with a few thousand dollars can participate in numerous lotteries. Indeed, there are "application mills" which, for a modest fee, might file applications in every LMDS lottery. Because an auction would be driven strictly by price, the cost of speculation would be high enough to weed out many of the application mill speculators. Any successful speculator would attempt to profit by selling the license. If another entity was willing to pay above the speculator's price, however, it would have placed a bid.

Competitive bidding also maximizes allocative efficiency. That is the very essence of bidding -- the license will always go to the person who values it most. Once the license is in the hands of the person who values it most, that person will have an incentive to maximize the value of the license by implementing the system as quickly as possible. In the event a speculator does enter and win, however, it must quickly maximize the value of its

successful speculation by selling the license to an entity ready to implement a system.

In the event Congress does not authorize a competitive bidding process, a lottery is the next most preferable selection procedure. Lotteries maximize processing efficiencies to the extent the Commission does not conduct a pre-lottery review of all applicants. While previous lotteries have engendered significant post-lottery litigation, the Commission can limit a recurrence of this by taking two steps. First, the Commission should require all applicants to submit a refundable deposit, a firm financial commitment and a comprehensive engineering proposal. Thus, the Commission should not use postcard applications because there will be an insufficient entry cost for marginal speculators.

Second, the Commission should pick one lottery winner and not rank subsequent applicants. Ranking the results of the lottery gives the second and third place entries too much incentive to litigate. In addition, there is little incremental value in ranking applicants since conducting another lottery would not take much time. Litigating over whether another lottery is necessary would waste substantial Commission resources.

Lotteries do little to promote allocative efficiency unless the Commission sets unreasonably high application fees. As a result, it is unlikely that the Commission will be able to completely avoid lottery speculation. Similarly,

lotteries do not ensure that a lottery winner will be the entity that will bring service to the public most quickly, since the cost of acquiring spectrum rights is unrelated to the commercial value of those rights.

Transfer of Licenses -- To minimize problems caused by speculation and to ensure LMDS is brought to the public as quickly as possible, the Commission should not impose transfer restrictions that would impede operation of the after-market which will get the license into the hands of the party that has the greatest incentive to bring service to the public.

The Commission must take all steps to deter speculation prior to the lottery.[3] Once the license has been granted, however, the Commission's primary goal should be to implement service to the public. Therefore, it should not impede market mechanisms which will achieve allocative and implementation efficiency.

* * *

In adopting rules for LMDS, the Commission should let market forces operate to the greatest extent possible in order to encourage innovation. Customer needs, rather than

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[3]Transfer restrictions have not previously deterred speculation. For example, the Commission established transfer restrictions for land mobile service in the 220 MHz band. These restrictions did not prevent 59,000 parties from submitting applications in one day. Similarly, the Commission initially limited the transfer of cellular licenses. The Commission has since changed its position and now allows for the free transferability of cellular licenses. 47 C.F.R. 22.920.

rules favoring a particular technology, should govern how LMDS evolves as a service.

Respectfully submitted,

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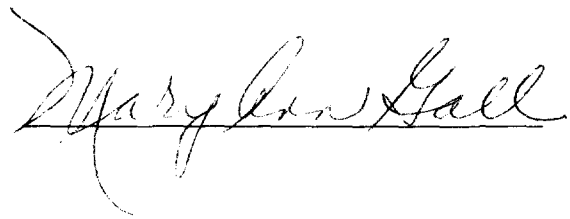
March 16, 1993

CERTIFICATE OF SERVICE

I, Mary Ann Gall, hereby certify that copies of the Comments of Ameritech on LMDS NPRM were sent on this, the 16th day of March 1993 by first class United States mail, postage prepaid, to those listed on the attached sheets.



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